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PRM	AA	4,855,237	8/8/89	Morinaga, et	al.,	435	320	8/21/	84		
PRM	AB	5,128,460	7/7/92	Piatak, Jr.,	., et al., 536 27			4/4/90			
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·		OTHER PRIOR A	RT (Includir	l Author, Title	, Date, Pertinent P	ages, Et	Lc.)				
PRM	AD	Alquist and	Janda, "cDN	A Cloning and In	Nitro Transcription Vitro Transcription Vitro Transcription Vitro	n of th		te Brome			
	AE	Dawson, et a production o	l., "cDNA c of infectiou	loning of the cost transcripts",	omplete genome of to Proc. Natl. Acad. S	bacco m ci. USA	osaic vi 83: 183	rus and 2-1836 (1	1986).		
	AF	Lebeurier, e Gene 12: 139	t al., "Inf -146 (1980)	ectivities of na	ative and cloned DNA	of cau	liflower	mosaic v	/irus",		
	AG	Brisson and 118: 659-668	Hohn, "Plan (1986).	t virus Vectors	: Cauliflower Mosaic	Virus"	, <u>Method</u>	s in Enzy	mology		
	АН	Dawson, et a <u>Virology</u> 172			s-Hybrid Expresses a	nd Lose	s an Add	ed Gene",			
	AI	Takamatusu, tobacco plan	et al., "Ex ts mediated	pression of bact by TMV-RNA", <u>TI</u>	cerial chloramphenione EMBO Journal 6: 3	ol acet 07-311	yltransf (1987).	erase ger	ne in		
	AJ	French, et al., "Bacterial Gene Inserted in an Engineered RNA Virus: Eff Expression in Monocotyledonous Plant Cells", <u>Science</u> 231: 1294-1297 (198									
	AL	Takamatsu, e mosaic virus	t al., "Pro RNA vector	duction of enker ", FEBS Letters	phalin in tobacco pr 269: 73-76 (1990).	bacco protoplasts using tobac (1990).					
	AM	Ooshika, et Antibodies D	al., "Ident irected aga	ification of the inst a Synthetic	e 30K Protein of TMV Peptide", <u>Virology</u>	by Imm 132: 7	pitation 84).	with			
	AN	Deom, et al. Virus Moveme	, "The 30-K ent", <u>Scienc</u>	ilodalton Gene l e 237: 389-394	Product of Tobacco M (1987).	Tobacco Mosaic Virus Potentiat					
	AO	Nozu, et al. Mosaic Virus	, "Chemical (Watermelo	and Immunologic n Strain) Prote	cal Characterization In", <u>Virology</u> 45: 57	of Cuc 7-585 (umber Gr 1971).	een Mott	en Mottle		
	AP			nical Character logy 70: 214-21	ization of Cucumber 5 (1976).	Green M	ottle Mo	saic Viru	18		
	Fukuda, et al., "Correlation between particle multiplicity and location on v of the assembly initiation site for viruses of the tobacco mosaic virus grouproc. Natl. Acad. Sci. USA 78: 4231-4235 (1981). Otsuki, et al., "Reconstitution of tobacco mosaic virus rods occurs bidirect from an internal initiation region: Demonstration by electron microscopic seproc. Natl. Acad. Sci. USA 74: 1913-1917 (1977).							n virion roup",	RNA		
								ectionall serology	y,",		
	AS				of Rod Assembly on Virology 101: 492-			omato and	i a		
1	AT	Meshi, et al Region of cu 54-64 (1983)	cumber Green	ide Sequence of n Mottle Mosaic	the Coat Protein Ci Virus (Watermelon S	stron a	nd the 3 RNA", <u>Vi</u>	' Noncodi rology 12	.ng 27 :		
V	AU	Ahlquist, et J. Mol. Biol			Sequence of Brome M	losaic V	irus RNA	3",			
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	BE	From the Bac	teriophage I	Lambda $ ho_{ m L}$ Promot	id Cloning Vehicles er", <u>Gene</u> 5: 59-76	(1979).			
	BF	Remaut, et a promoter of	l., "Plasmic coliphage la	d vectors for hi ambda", <u>Gene</u> 15:	gh-efficiency expre 81093 (1981).	ssion c	ontrolled 1	by the ,	ρL
	BG			bacterium-mediat 25: 177-179 (198	ed delivery of infe 7).	ctious	maize stre	ak viru	s into
	вн				viroid infections m lol. Biol. 6: 221-22			plasmi	d
	ві	Grimsley, et by using the	al., "'Agı Ti plasmid'	roinfection,' an ", <u>Proc. Natl. A</u>	d alternative route cad. Sci. USA 83: 3	for vi 282-328	ral infect 6 (1986).	ion of p	plants
	вј				lete nucleotide seq Nucleic Acids Rese				South
	вк	Donson, et a DNA", <u>Virolo</u>			Infectivity of Clo	ned Dig	itaria Str	eak Vir	us
	BL			ection of <u>Tritic</u> 69: 891-896 (19	um <u>aestivum</u> with Cl 88).	oned DN	A of Wheat	Dwarf	
	вм				inoculation of plan ology 10: 225-234 (tomato go	lden	
	BN	Gardiner, et is not requi 899-904 (198	red for syst	tic analysis of temic spread of	tomato golden mosai symptom development	c virus ", <u>The</u>	: the coat EMBO Journ	protein al 7:	n ·
	во		., "Primary	Structure of ty 044 (1985).	rosinase from <u>Strep</u>	tomyces	glaucesce	ns",	
	BP				a Male-sterile Gene ", <u>Hort Science</u> 23:				
	BQ	Rao and Devi Journal of H	, "Variation eredity 74:	n in expression 34-38 (1983).	of genic male steri	lity in	pearl mil	let",	
	BR		criptional (the Maize Mitochon s Male-Sterile Cyto			uce a	
	BS	Pearson, O.H	"Nature	and Mechanisms o ce 16(4): 482-48	f cytoplasmic Male 6 (1981).	Sterili	ty in Plan	ts:	.
	вт			rsuchungen uber zychtung 80: 265	die Ursachen der Po -276 (1978).	llenstr	ilitat bei	Allium	
	BU		ytoplasmic N		sional Analysis of ssica napus", Theor				m
	вv	Padmaja, et	al., "Cytoge	enetical Investi ", <u>Cytologia</u> 53:	gations on Genic Ma 585-589 (1988).	le Ster	ility in <u>P</u>	etunia	
	в₩	Ebert, et al <u>Cell</u> 56: 255			Self-Incompatibili	ty in F	lowering P	lants",	
\forall	вх				obacco Mosaic Virus gy", <u>Phytopathology</u>				ting
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		OTHER PRIOR	R ART (Inclu	ding Author, Ti	tle, Date, Pertinen	t Pages,	, Etc.)	
PRM	СВ			ide sequence of USA 79: 5818-58	tobacco mosaic viru 22 (1982).	s RNA",		
[СС			enicol Acetyltra logy 53: 737-75	ansferase from Chlor 5 (1975).	ampheni	col-Resist	ant
	CD	Logemann, et 163: 16-20 (oved Method for	the Isolation of RN	A", <u>Ana</u>	1. Biochem	<u>.</u>
	CE	Zagursky, et DNA and Supe	al., "Rapid rcoiled Pla	d and Easy Seque smid DNA", <u>Gene</u>	encing of Large Line Anal. Tech. 2: 89-9	ar Doub 4 (1985	le-strande).	d DNA
	CF	Goelet and K Coterminal M	arn," Tobac essenger RN	co Mosaic Virus A's and their Co	Induces the Synthes	is of a Biol.	Family of 154: 541-5	3' 50 (1982).
	CG				RNA Isolated from T : 473-481 (1983).	obacco	Leaf Tissu	e Infected
	СН	Kirkegaard a Cell 47: 433			sm of RNA REcombinat	ion in	Poliovirus	",
	CI			"Genetic recomb: 1: 528-531 (1986	ination between RNA	compone	nts of a m	ultipartite
	CJ	Keen, et al. bacteria", g	, "Improved ene 70: 191	broad-host-rang -197 (1988).	ge plasmids for DNA	cloning	in Gram-n	egative
Zer	СК	Beck, et al. phosphotrans	, "Nucleotion ferase gene	de sequence and from transposo	exact localization n Tn <u>5</u> ", <u>Gene</u> 19: 327	of the :	neomycin 982).	
	CL	Brisson, et Nature 310:			erial gene in plants	by usi	ng a viral	vector",
	СМ				Scanning During Tra ant Mol. Biol. Rep.			
	CN	Gooding and Large Quanti	Hebert, "A : ties", <u>Phyt</u>	Simple Technique opathology 57:	e of Purification of 1285 (1967).	Tobacc	o Mosaic V	irus in
	со				for Radiolabeling DN Anal. Biochem. 137:			onuclease
	CP				echnique for Radiola c Activity", <u>Anal. B</u>			
	cq		f Protein U		e Method for the Qua inciple of Protein-D			
	CR				d for the Detection es", Plant Mol. Biol			
	cs				and Engineering of omic RNA", J. Virol.			
	СТ	Kumagai, et <u>Gene</u> 94: 209			tion of rice α-amyla	se by <u>S</u>	accharomyc	es cerevisiae
	CU				in <u>Oryza sativa</u> : Cha ation", <u>Mol Gen. Gen</u>			
V	cv	Hamamoto, et (CGTase) Gen 51: 2019-202	e from Alka	eotide Sequence lophilic <u>Bacill</u> u	of the Cyclomaltode us sp. Strain No. 38	xtrin G -2.", <u>A</u>	lucano-tra gric. Biol	nsferase (. Chem.
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	DC				selection plasmid v Nucleic Acids Resea			
	DD			replicas and p 7: 2115-2136 (1	ermanent collections 979).	of rec	ombinant D	NA plasmids".
	DE				Acetyl Esterases fro 1184-1192 (1973).	m Extra	cts of	
	DF	Ounissi and esterase in	Courvalin "I Escherichia	Nucleotide sequ coli", <u>Gene</u> 35	ence of the gene <u>ere</u> : 271-278 (1985).	A encod	ing the er	ythromycin
	DG				the Penicillin G Acy 4: 2603-2607 (1988).		ne from <u>Ar</u>	throbacter
	DH			ic evaluation o . Chem. 58: 789	f Tian Hua Fen (THF) -798 (1986).	- hist	ory, chemi	stry and
	DI				Proteins and Glycor . Microbiol. 39: 649			ibiting
	DJ				of Ricin and Relate 262: 5908-5912 (1987		Lectins of	n
	DK			rification and 28-11633 (1987)	Characterization of .	Trichos	anthin",	
	DL				equence of α-Trichos , <u>J. Biol. Chem.</u> 265			
	DM	acutely and	chronically	infected cells	of human immunodefi of lymphocyte and m 6: 2844-2848 (1989).	ononuc1		
	DN	Shaw, et al. <u>Gene</u> 97: 267			n cDNA and its expre	ssion i	n <u>Escheric</u>	hia coli",
	DO				NA plant virus infec 7066-7070 (1984).	tion de	rived from	clones viral
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	DQ	Takamatusu, mosaic virus	et al., "Pro RNA vector	oduction of enk ", <u>FEBS Letters</u>	ephalin in tobacco p 269: 73-76 (1990).	rotopla	sts using	tobacco
	DR	Dawson, et a <u>Virology</u> 172			-Hybrid Expresses an	d Loses	an Added	Gene",
	DS				f a bacterial gene b : 7204-7208 (1991).	y a tob	acco mosai	c virus-based
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			Laemmli, U.K	., "Cleavage	of Structural	Proteins during the	Assemb	ly of the	Head of			
1	EG	,	Bacteriophag	e T4", <u>Natu</u>	<u>ce</u> 227: 680-685	(1970).						
- / - 			Towhin et a	1 "Electro	nhoretic transf	er of proteins from	nolvac	rylamide	cole to			
$\sim 1/$	EH									A		
			nitrocellulose sheets: Procedure and some applications", Proc. Natl. Acad. Sci. USA 76: 4350-4354 (1979). Grierson, D., et al., Plant-Molecular Biology Blackie, London pp. 126-146 (1984).									
	D.T.		Grierson, D.	, et al., <u>P</u>.	lant Molecular I	Biology Blackie, Lor	don-pp.	126-146	(1984).			
	EI											
			Gluzman, Y.,	et al., Gor	munications in	Molecular Biology:	Viral V	ectors Co	ld Sprin	<u></u>		
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